PROC. ENTOMOL. SOC. WASH.
87(4), 1985, pp. 746–750

A NEW SPECIES OF *PSAMMATHODOXA* DYAR FROM COSTA RICA (LEPIDOPTERA: NOCTUIDAE: CATOCALINAE

JOHN G. FRANCLEMONT

Department of Entomology, Comstock Hall, Cornell University, Ithaca, New York 14853.

Abstract.—The new species, *Psammathodoxa natadoides*, the second species of its genus, is described from Santa Rosa National Park, Costa Rica.

In 1921 Dyar described the strange noctuid, *Psammathodoxa cochlidioides*, from Brownsville, Texas. Recently, Daniel H. Janzen brought to me for identification some of the Lepidoptera that he and W. Hallwachs had collected in Costa Rica; among the many specimens were several of a new species of *Psammathodoxa*. He asked that it be described so a name would be available when he wished to refer to the species in his studies on the Lepidoptera of Costa Rica. The discovery of a second species of *Psammathodoxa* with exaggerations in the development of some of the structures of the genitalia does not help to determine the relationships of this odd genus. Its position after *Gonodonta* Hübner in the (McDunnough, 1938) check list seems incorrect; after some study, I am inclined to suggest a closer association with *Hypsoropha* Hübner.

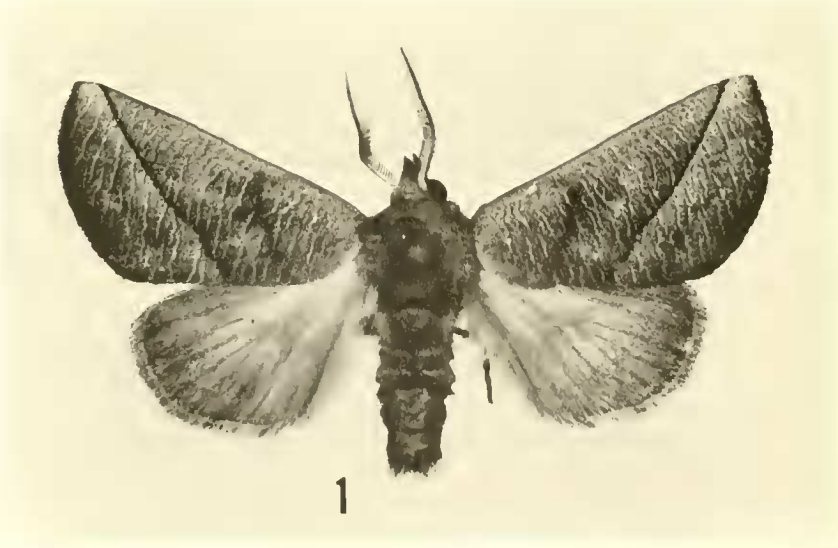
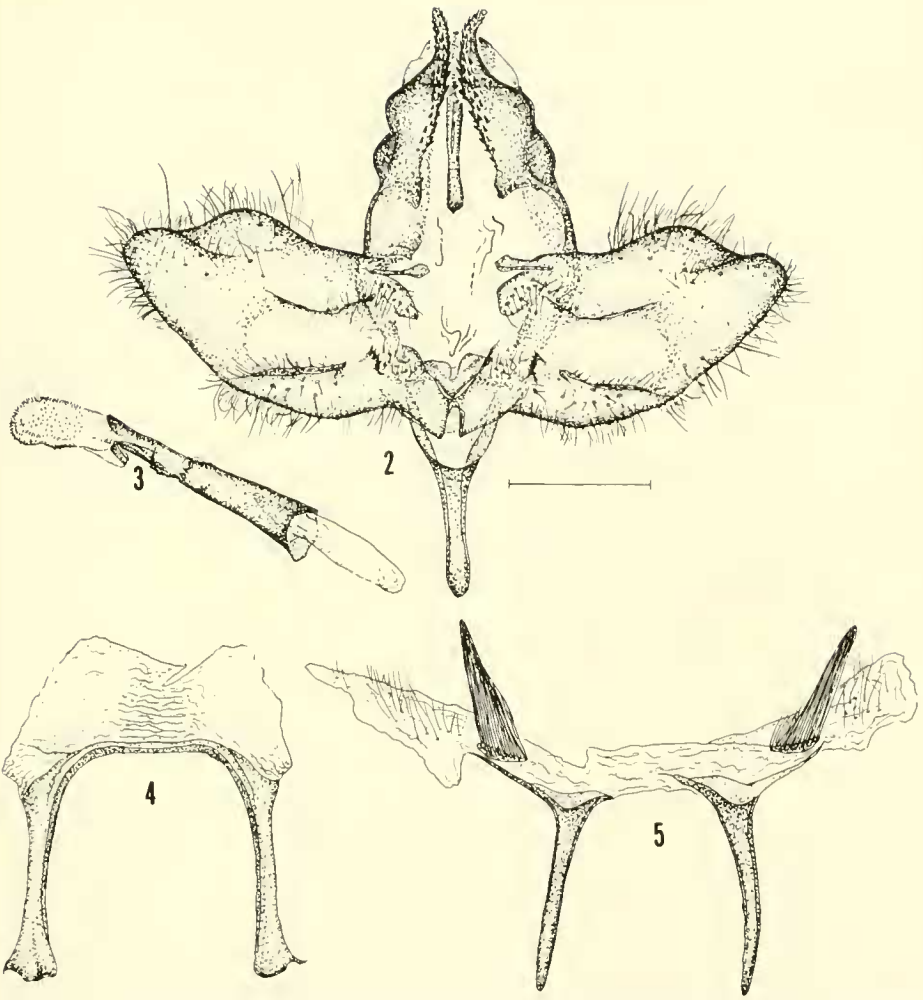


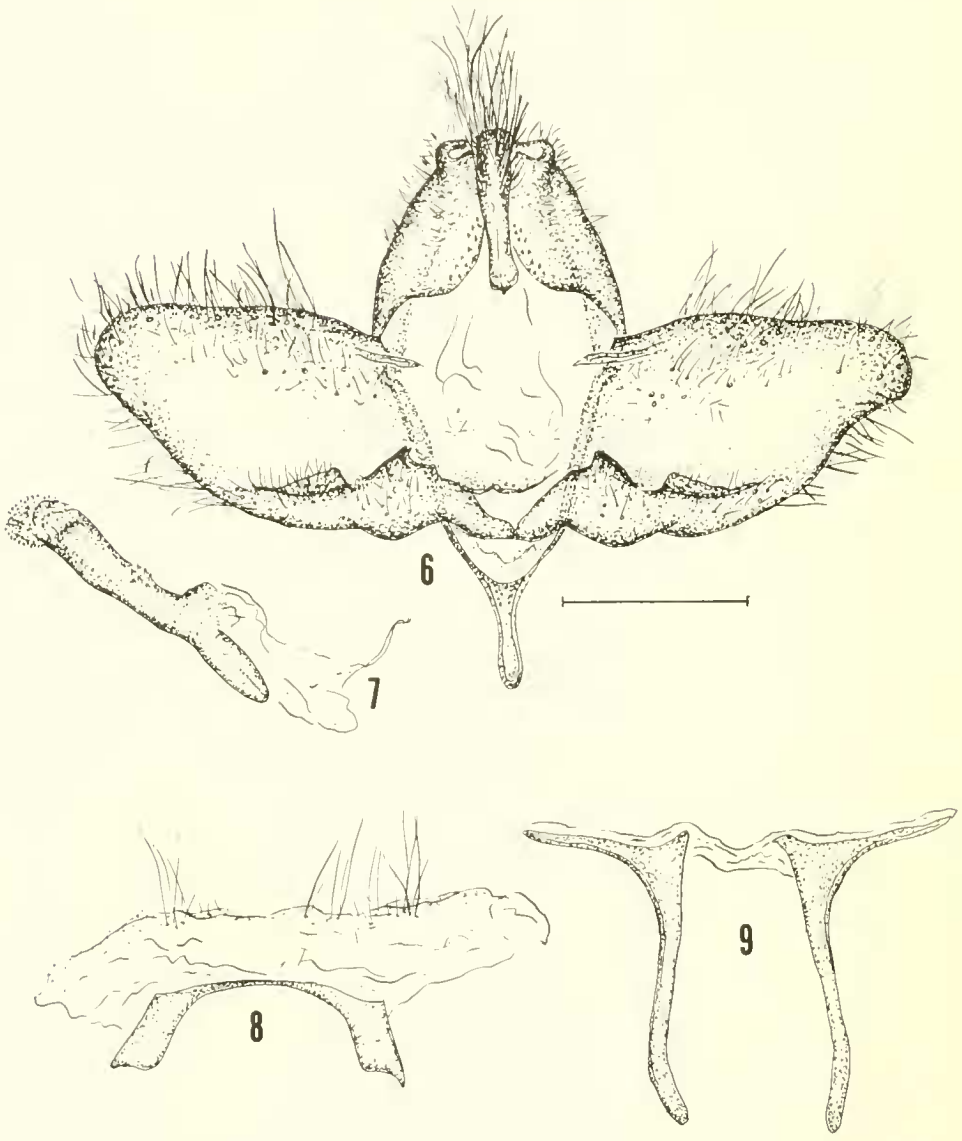
Fig. 1. *Psammathodoxa natadoides*. Male, holotype.



Figs. 2–5. *Psammathodoxa natadoides*. 2, Male genitalia with aedeagus removed. 3, Aedeagus. 4, Tergum, eighth abdominal segment. 5, Sternum, eighth abdominal segment. Scale of drawings = 1 mm.

Psammathodoxa natadoides Franclemont, New Species

Diagnosis.—This species is superficially very similar to *cochlidioides*, but it differs in the somewhat larger size and the course of the postmedial line, which at its inception on the costa is farther inset from the apex of the fore wing. The genitalia of both sexes differ in many ways from those of *cochlidioides*. The male has the lateral lobes of the tegumen produced caudad into bluntly pointed projections; the spines on the lobes are stronger and more numerous; and the valves have the coastal margins expanded beyond their middles and appearing somewhat sinuate. The female has the ventral plate of the ostium one-third wider from side to side, the anterior apophyses shorter and thicker, the posterior apophyses longer and thicker, the ductus bursae approximately four times as long, and the bursa three times as large with two long, linear signa; *cochlidioides* has a single, small



Figs. 6–9. *Psammathodoxa cochlidioides*. 6, Male genitalia with aedeagus removed. 7, Aedeagus. 8, Tergum, eighth abdominal segment. 9, Sternum, eighth abdominal segment. Scale of drawings = 1 mm.

lunulate signum. The modifications of the last sternum and tergum (Figs. 4, 5), the eighth segment, of the male differ between the two species; *natadoides* has a lateral cluster of heavy setae on each side of the apical (caudal) margin of the sternum, absent in *cochlidioides*, and the apophyses of the tergum much longer than those of *cochlidioides*.

Description.—Head, thorax, and fore wings whitish gray with a slight brownish tint; fore wing paler beyond postmedial line and along costa, crossed by many, fine, pale, outwardly diagonal lines, postmedial line brownish black, straight, inset from apex, angled to inner margin, antemedial line less well defined, diffuse, curved

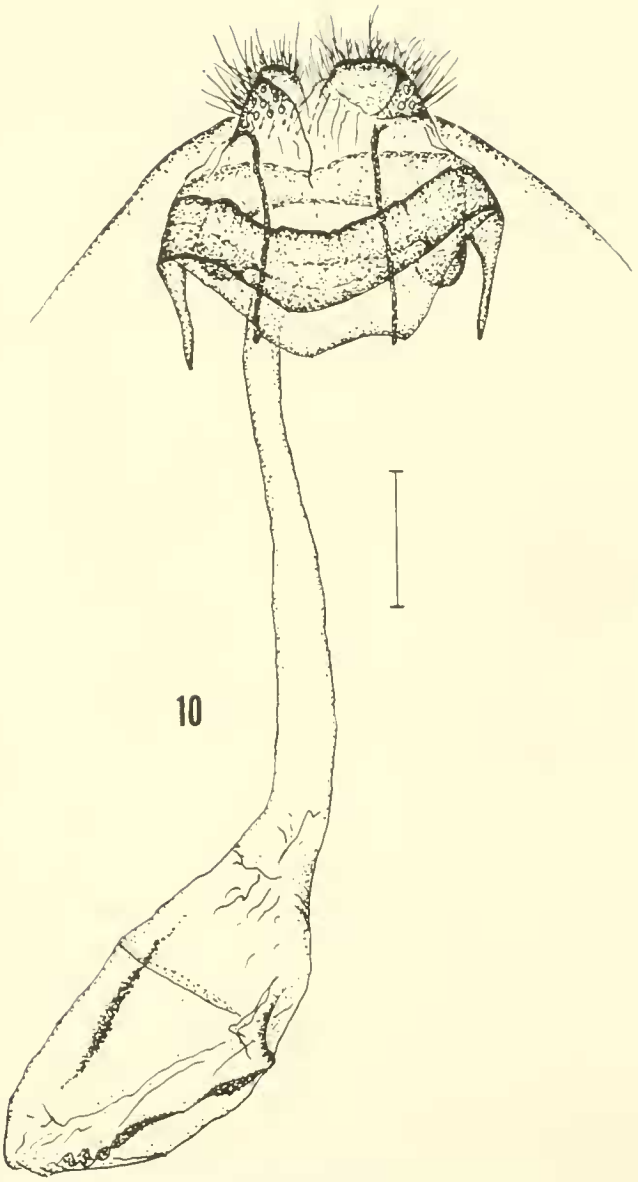


Fig. 10. *Psammathodoxa natadoides*. Female genitalia. Scale of drawings = 1 mm.

outwardly from costa to upper part of discal cell, then more or less straight to inner margin and parallel to postmedial line; one specimen with a small, black, subcircular reniform, other 35 specimens without an indication of reniform or orbicular; hind wing light fuscous, paler toward base; abdomen fuscous; below uniform fuscous, fore wing darker than hind wing.

Length of fore wing, males.—13–15 mm, most 15 mm; females: 18–20 mm, most 20 mm.

Male genitalia.—Figs. 2, 3.

Female genitalia.—Fig. 10.

Holotype.—Male. Santa Rosa National Park, Guanacaste Prov., Costa Rica, 20–22 June 1980, D. H. Janzen and W. Hallwachs. Collection United States National Museum of Natural History courtesy of Daniel H. Janzen.

Paratypes.—25 males, 10 females. Santa Rosa National Park, Guanacaste Prov., Costa Rica, May, June, July, August, November, and December, 1979, 1980, and 1981, those collected in 1979 by D. H. Janzen, those in 1980 and 1981 by D. H. Janzen and W. Hallwachs. Two in collection United States National Museum, 3 in collection J. G. Franclemont, 30 returned to D. H. Jansen.

The moth bears a likeness to some of the species of the genus *Natada* in the Cochlidiidae (= Limacodidae), thus the species name.

Robert W. Poole is thanked for reading a draft of this paper. The drawings are by James S. Miller, the photograph by the author.

Literature Cited

Dyar, H. G. 1921. New American Noctuidae and notes. Insec. Insc. Menst. 9: 40–45.

McDunnough, J. 1938. Check list of the Lepidoptera of Canada and the United States, Part 1, Macrolepidoptera. Mem. South Calif. Acad. Sci. 1: 1–272.